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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/909,277	07/19/2001	Glenn W. Gale	BUR92000136US1	2205

7590 01/20/2004
Burton A. Amernick
Connolly Bove Lodge & Hutz LLP
P.O. Box 19088
Washington, DC 20036-3425

EXAMINER

WINTER, GENTLE E

ART UNIT	PAPER NUMBER
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1746

DATE MAILED: 01/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/909,277	GALE ET AL.	
	Examiner	Art Unit	
	Gentle E. Winter	1746	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
 * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
 a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION***Response to Amendment and Remarks***

1. Applicant has added the limitation "applying an intact and contiguous film". The prior art of record does not teach the application of an intact and contiguous film, but rather the application of a fluid whereby a film is subsequently formed. Applicants' arguments, with respect to Sakai, are persuasive inasmuch as Sakai does not teach the step of applying an "intact contiguous film". The argument is not deemed persuasive with respect to the statements that Sakai only encapsulates the particles and does not generally lay down a layer. The spraying of the fluid to the surface that results in the particle encapsulation would similarly coat the substrate. At column 2, line 13 *et seq.* Sakai discloses:

*** comprising: cooling means for cooling a substrate to below zero; wet gas supply means for supply a gas containing atomized water to the surface of the substrate cooled by the cooling means to form ice on the surface of the substrate; and ice removing means for removing the ice formed on the surface of the substrate.

2. And column 3, line 24 discloses:

The apparatus includes an ice forming unit 10 for cooling a substrate W, *** and taking the substrate W having ice formed on its surface out of the ice forming unit 10..."

As to the argument, Sakai does not teach removing the ice with sonic energy. Rather Sakai blows the ice with high-pressure gas. At e.g. column 7, line 62 *et seq.* Sakai discloses:

The ice removing unit 20 may be constructed without the adoption of high pressure gas ejection. For example, the ice may be separated from the surface of the substrate W by applying ultrasonic waves and eliminated by the action of a centrifugal force resulting from the rotation of the substrate support 211. (Emphasis added)

Claim Rejections - 35 USC § 102—Withdrawn

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-12, 14-21, 23-33 were rejected under 35 U.S.C. 102(b) as being anticipated by United States Patent No. 5,857,474 to Sakai et al (Sakai). Applicants' amendments and arguments have overcome the rejection.

Claim Rejections - 35 USC § 103--Withdrawn

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 13, 22, and 34 were rejected under 35 U.S.C. 103(a) as being unpatentable over Sakai as discussed above and United States Patent No. 4,491,484 to Williams. The rejection using Sakai has been withdrawn.

Claim Rejections - 35 USC § 112

1. Claims 1-34 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claims contain subject matter that was not described in

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the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention.

Specifically, the support for the newly added limitation "applying an intact and contiguous film" was not found in the currently pending application. The portion listed at page 4 line 5 does not disclose the application of an intact and contiguous film, but rather the formation of the same.

Conclusion

3. The following art is considered relevant to the present invention, but is not currently believed to form the basis for a proper rejection. United States Patent No. 4,199,620 discloses forming a protective, strippable, elastomeric film on a highly reflective surface. According to the invention the coating "encapsulates dust and other particulates on the surface...[and]...the film may be stripped intact, removing the entrapped particulates and leaving no residue on the mirror surface." This invention uses evaporation for layer solidification, and does not use ultrasonic energy.

4. United States Patent No. 4,199,375 discloses dust and grease are removed from a surface by applying to the surface "a liquid composition" and the "applied composition forms a self supporting film upon drying. Thereafter, the film is stripped from the surface."

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gentle E. Winter whose telephone number is (703) 305-3403. The examiner can normally be reached on Monday-Friday 7:00-3:30.

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6. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy P. Gulakowski can be reached on (703) 308-4333. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications. The direct fax number for this examiner is (703) 746-7746.

7. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Gentle E. Winter
Examiner
Art Unit 1746

Zeinab Elarini

January 12, 2004

**ZEINAB EL-ARINI
PRIMARY EXAMINER**